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REMARKS

Claims 1-36 are pending in this application. Claims 1, 15 and 27 are the independent claims. The undersigned attorney appreciates the Examiner's indication of the allowability of Claims 27-36. The indication of allowability of claims 11 and 12 if rewritten in independent form including all the limitation of any intervening claims is also gratefully appreciated. However, since the Applicants believe independent claim 1 is patentable over the cited references, claims 11 and 12 have not been rewritten at this time

In response to the Examiner's objection to the drawings, a replacement set of formal drawings is filed herewith, in which a "Prior Art" label has been added to Figure 1. Further, the reference numbers in Figure 3 are now drawn so as to be in compliance with 37 CFR 1.84.

Claims 1-3, 6-10 and 14-25 stand rejected under 35 U.S.C. 102(b) as being anticipated by Ellis, U.S. Patent No. 6,122,418. This rejection is hereby traversed for at least the following reasons.

The present invention relates to a dispersion compensating module in which each module imparts an increment of dispersion compensation to every wavelength that passes through it. That is, dispersion compensating module i serves as the final increment of compensation required by the wavelengths in band i, and merely one part of the total dispersion compensation required by the wavelengths in bands (i+1) to N. For instance, referring to the embodiment of the invention shown in FIG. 3 of the specification, dispersion compensator 308₁ in module 301₁ imparts all the dispersion compensation that is required by the wavelengths in band 1 and a portion of the dispersion compensation that is required by bands 2 through N. Similarly, dispersion compensator 308₂ in module 301₂ imparts the final increment of dispersion compensation required by the wavelengths in band 2, but only a portion of that required by bands 3 through N. In other words, dispersion compensators 308₁ and 308₂ together provide the total amount of dispersion compensation that is to be imparted to the wavelengths in band 2.

This feature of the invention is reflected in claim 1 of the application by reciting that a first dispersion compensating module having a dispersion compensating element for substantially compensating <u>each</u> wavelength in the WDM optical signal for dispersion

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at a prescribed wavelength within a first sub-band of said prescribed bandwidth. That is, the dispersion compensating element in the first module provides a prescribed amount of dispersion compensation to every wavelength. For some wavelengths (those within the first sub-band) this will be the total amount of dispersion compensation that is required. For other wavelengths (those outside the first sub-band), this will only be a portion of the total amount of dispersion compensation required by these wavelengths.

In contrast to the present invention, Ellis shows a dispersion compensating arrangement in which dispersion compensation is provided to each wavelength (or waveband, as the case may be) by a different dispersion compensating element. Specifically, the fiber grating F_1 provides the dispersion compensation that is to be imparted to wavelength λ_1 , fiber grating F_2 provides the dispersion compensation that is to be imparted to wavelength λ_2 , and fiber grating F_3 provides the dispersion compensation that is to be imparted to wavelength λ_3 . That is, fiber grating F_1 , for instance, does not provide any dispersion compensation to wavelengths λ_2 and λ_3 . Accordingly, Ellis does not show a dispersion compensating element for substantially compensating each wavelength in the WDM optical signal for dispersion at a prescribed wavelength within a first sub-band of said prescribed bandwidth. Accordingly, Applicants submit that independent claims 1 and 15 and the claims that depend therefrom are allowable over Ellis.

Conclusion

In view of the foregoing, it is believed that all claims in the application are now in condition for allowance and early passage of this case to issue is respectfully requested. If the Examiner believes there are still unresolved issues, a telephone call to the undersigned would be welcomed.

Fees

If there any fees due and owing in respect to this amendment, the Examiner is authorized to charge such fees to deposit account number 50-1047.

Respectfully submitted,

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I hereby certify that this correspondence and any document referenced herein is being sent to the United States Patent and Trademark office via Facsimile to: 703-872-9306 on 6/28/05

Marjorie Scariati

(Printed Name of Person Sending Correspondence)

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